Socio demographic variations in Diabetic-foot-care-knowledge among people with diabetes in Karachi

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Background

Diabetes related foot amputations are among the severely devastating outcomes of insufficient diabetes care. Prevention of foot ulcers by increasing awareness about foot care is a universally applicable and affordable preventive action. However, lack of time and other factors may limit provision of appropriate diabetic foot related education. Identifying the most important areas of knowledge deficit in general and in various subgroups of people with diabetes or their care takers can greatly help in making education more useful. The objective of this study was to determine knowledge of foot care among people with diabetes and to explore socio demographic differences if any.

Methodology

A short researcher-administered questionnaire having 15 questions about diabetes foot care related knowledge was used to collect data from patients attending the Diabetes Clinic. Data was collected from all willing subject for a consecutive period of two weeks till the required sample of 100 subjects was achieved. Data was entered in excel, transferred to SPSS and Statistics were performed using SPSS version 14. Based on answers to question knowledge score was calculated and categories of subjects having low, fair or good knowledge was made.

Results

Overall knowledge of people with diabetes about diabetic foot care

The mean knowledge score overall was 10.9 ± 2.2 out of a total possible score of 15. Females had slightly higher mean score 11.2 ± 1.7 as compared to males 10.6 ± 2.7 for males ($P=0.148$). For question about "need for extra care for nails" and "possibility of reoccurrence of wound" a significantly higher proportion of females gave correct answers as compared to males ($P<0.05$). For question about "treatability of foot ulcers" a notably higher proportion of males gave correct answers as compared to females ($P = 0.07$).

Knowledge of males and female about diabetic foot care

Overall knowledge was lowest for "applying moisturizers" as only 46% gave correct answer. Also for questions about "feet drying", "soaking feet in hot water", "foot wear choice", "and management of severe wounds" knowledge level was low as only 50-59% subjects gave correct answers. Knowledge was better for questions about "wound healing time" and "treatability of foot ulcers" as overall 70-80% subjects gave correct answers. Knowledge was good for questions about "avoiding barefoot walking", "consulted a diabetes specialist", "risks from tight shoes", "risk from hot water", "need for daily monitoring of feet", "effect of uncontrolled diabetes on other organs" and "need for professional dressing of wounds" as overall >90% gave correct answers.

Percentages of the correct responses to questions related to the knowledge of foot care

S.no	Questions related to knowledge of foot care	% of correct answer
1	The wound of persons with diabetes heal as normal people at appropriate time.	77.00%
2	Patient with diabetes should not walk barefoot.	92.00%
3	There is no need for drying feet after washing for people with DM as feet air dry by themselves.	53.00%
4	People with DM should apply lotion, oil, petroleum jelly on the front and back of the feet but not between the fingers.	51.00%
5	No matter how little the wound is, people with DM should consult a diabetes specialist for treatment.	95.00%
6	People with DM do not need any extra care for cutting nails.	46.00%
7	Tight or ill fitted shoes can cause wound in people with DM	95.00%
8	People with DM can hot massage their feet as well as use hot water for washing feet in winter.	54.00%
9	People with DM should daily inspect their feet.	92.00%
10	With poor control of DM, people of diabetes can develop diabetes complication in other organs of the body.	95.00%
11	If a person with DM, develop wound for the first time he/she can develop wound afterwards too.	67.00%
12	People with DM can wear shoes of their choice.	56.00%
13	Wound in people with DM cannot be healed.	73.00%
14	Stitches can be taken on the wound of people with DM when the wound has worsened.	51.00%
15	Dressing should be done by a professional dresser for the wound of people with DM.	95.00%

Conclusion

This study has identified areas to focus in general and in relation socio demographic subgroups. Evidence of significant subgroup differences indicate need for undertaking larger studies and making evidence based diabetes education programs

Keywords

Diabetes Diabetic-Foot-care-knowledge Gender Pakistan